

# Development integration via real and technological convergence. Experience of Poland and conclusions for Ukraine\*

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**ABSTRACT.** The paper summarizes main achievements, losses and gains during the first decade of Poland's membership in the EU, while also aiming at development of suggestions for the Polish economic policy in the years to come, as well as draws conclusions for Ukraine, which has now elected the strategy of international economic co-operation. The first part of the paper presents an empirical analysis of Poland's both real and technological convergence with the developed EU countries. These data show that since 1994, as the process of Poland integration with the EU commenced, our country significantly reduced the income and technology gap as compared to the EU. During the financial crisis, Poland 'felt' better than most European countries. In the second part of the paper we attempt to answer the question as to the current conditions of Polish economy development. It is demonstrated that Poland's economic success was due to multiple factors such as endogenous and exogenous, historical and those derived from present events. However, it can be assumed that integration with the EU has been an important positive factor in development of Poland during recent 20 years. Great importance was also vested in the implementation of economic reforms in Poland as well as in policy of the government, although not faultless. The last section of the paper identifies problems now faced by the EU and individual member states, including Poland as regards future years till 2020.

**KEYWORDS.** Economic integration, technological convergence, economic policy of EU members states, economic development strategy.

## Introduction

A quarter-century ago Poland chose to switch to Europe-oriented model for economy, state and society modernization, as initiated by the first post-communist government Prime Minister Tadeusz Mazowiecki (October 1989). However, the actual proc-

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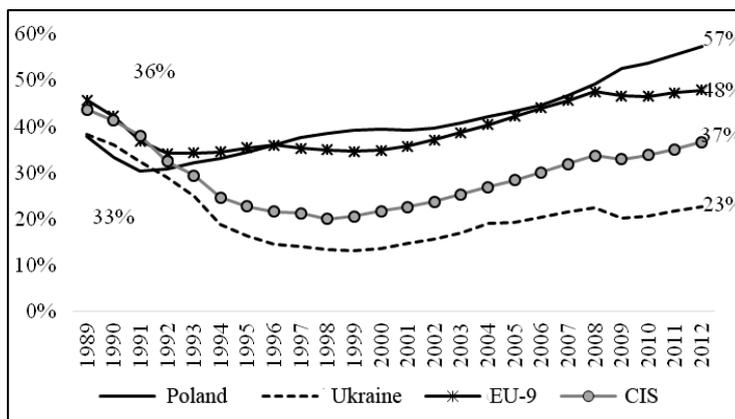
ess of European integration began only in 1994, whereas in ten years it was accomplished by Poland accession to the European Union. The decade of Poland implementing European ties and socio-economic cohesion is a good point for recapitulating, evaluation of losses and benefits, as well as generating forecasts for the future. Hopefully, this will be useful also for Ukraine in selecting a respective strategy of international economic cooperation. The country still suffers from the aftermath of Soviet 'modernization', which has lasted for 25 years longer than in Poland. This poses one of the significant barriers after the Soviet Union collapse by hindering better use of 'soft' development factors such as social capital and human capital.

One should not ignore liberalization globalization developing in terms of the information and telecommunications revolution. Internal market is already not enough for further development, therefore it is necessary to introduce new type competition mechanisms based on finding synergistic effects of technological, managerial, marketing, financial and institutional innovations. It is crucial to determine how the above could be achieved and which approaches should be focused upon to optimally use own internal development capacity while preserving the synergistic effects of combining external and internal (specific) factors.

The answer to this question can be provided by analyzing development results of those countries that have chosen the other way and comparing them with own results. Poland is an appropriate object for such comparison in terms of the success it has achieved in the field of real convergence, economic growth, quality of life, technological development and economy modernization.

### **Real and systematic convergence**

On the eve of systemic transformation in Poland, much like in other countries of post-socialist space, level of development measured by the real GDP level had been much lower than in Western Europe countries. The real GDP value in Poland and Ukraine was similar and amounted to 33 % (Poland) and 36 % of the EU-15 GDP level in Ukraine (Fig. 1).



**Fig. 1.** GDP per capita in selected countries and in Western Europe (GDP per capita EU-15 = 100%) by constant prices in 2012

Source: author's estimation by CTEDB database information, 2013<sup>2</sup>.

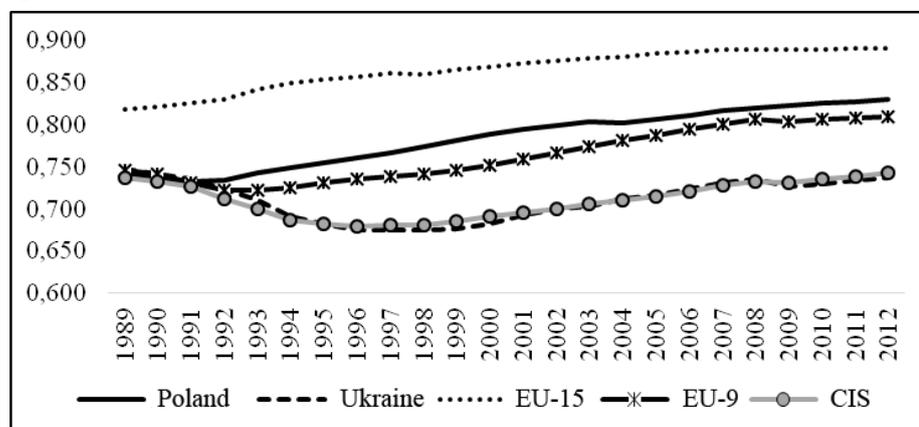
The effects of transformational shock and global financial crisis in 2009 produced different impact on the post-socialist countries. Poland's economy developed faster than that of Ukraine, therefore during 1990–2012 Poland was catching up fast with EU-15 economies. Consequently, the Polish economy has reduced the underdevelopment level in comparison with this group of countries by 13 %, whereas Ukraine has fallen far behind as compared to Western Europe countries by 13 % of GDP per capita.

The EU-9 countries (except Poland, all post-socialist countries being members of the EU, namely Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Romania, Slovakia, Slovenia and Hungary), have much like Poland commenced the process of systematic reducing distance to the EU-15 countries after a relatively short period of divergence in the first half of the 1990s. At that, during this period differences in relation to the EU-15 countries increased, while reduction rate thereof had up to 2000 been slower than in Poland. In turn, during 2000–2006, the convergence process of the EU-9 countries with respect to the EU-15 ones progressed faster than in Poland<sup>3</sup>.

<sup>2</sup> CTEDB, 2013, The Conference Board Total Economy Database, January 2013, The Conference Board Inc., [E-resource] – Access mode: [www.conference-board.org](http://www.conference-board.org), [date of access: 10.09.2013]

<sup>3</sup> Firszt D., Jabłoński Ł., Tokarski T., Woźniak M.G., 2009, Convergence and Divergence in Europe: Polish and Ukrainian Cases: Monograph / scientific editors Dmytro Lukianenko, Viktor Chuzhykov, Machal Gabriel Woznaniak, Foundation of the University of Economics in Krakow, Krakow, p. 603–631. [In Polish]

Noteworthy are comparable HDI (Human Development Index) characteristics. This index is calculated as the arithmetic mean, which synthesizes indicators characterizing social life sphere (healthcare and education) and economic prosperity (GDP per capita).



**Fig. 2.** Human Development Index (HDI) value in selected countries (1989–2012)

Source: author's estimation by UNDP database information, 2013a<sup>4</sup>, b<sup>5</sup>.

Poland and the EU-9 countries demonstrated systematic HDI improvement. In turn, the CIS countries experienced this index decline. This trend changed only early in the first decade of the XXI century. Thus, it can be argued that the divergence between countries that have chosen the EU integration course and other post-socialist space countries during transition period, especially in the 1990s, also dealt with non-income aspects of social life.

The presented convergence and distancing processes within the group of countries analyzed are expressed in terms of differences in the economic growth dynamics.

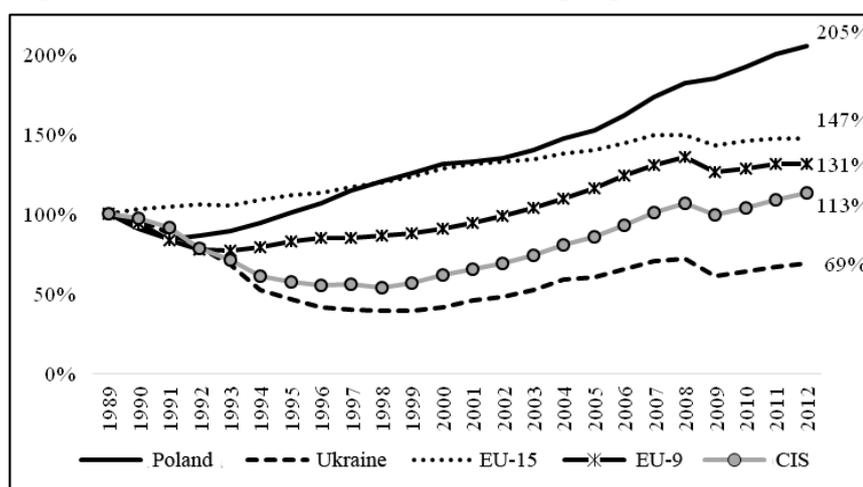
Transformational recession in Poland was the shortest (ended in 1991) and the least pronounced (decline in GDP in 1990 was circa 7 %) among all countries undergoing transition from centrally managed (administrative) economy to market economy<sup>6,7,8,9,10</sup>. Due

<sup>4</sup> UNDP, 2013a, UNDP statistical data, "Hybrid HDI", UNDP, [E-resource] – Access mode: <http://hdr.undp.org/en/data/trends/hybrid/>, [date of access: 10.09.2013]

<sup>5</sup> UNDP, 2013b, International Human Development Indicators, UNDP, bazadanych on-lin, [E-resource] – Access mode: <http://hdrstats.undp.org/en/tables/>, [date of access: 10.09.2013]

<sup>6</sup> Kołodko G.W., 2007, Success in two-thirds. Polish political transformation and its future, «Economist», № 6. [In Polish].

to this, in 2012 Poland's GDP was higher as compared to 1990 and amounted approximately to 126%. The average annual growth rate in Poland during 1991–2012 made 3.72% being higher than that of the EU-15 countries (1.61%) and the EU-9 ones (1.52%). For the entire period analyzed, only Luxembourg among the EU countries was been developing faster than Poland.



**Fig. 3.** GDP dynamics in selected countries during 1990–2012 (in USD by PPP, constant prices of 2012)

Source: author's estimation by CTEDB database information, 2013<sup>11</sup>.

The EU-9 countries during 1991–2012 demonstrated a weaker average annual GDP growth rate than Poland. This was caused by a long period of transformational recession, as well as by GDP growth dynamics till 2000 weaker than in Poland and by more perceptible effects of the 2008–2009 financial crisis. We should also note pronounced growth rates in the EU-9 countries (especially the Baltic countries) during 2000–2008 enabling them to

<sup>7</sup> Kołodko G.W., 2009, Great Transformation 1989-2029. Could it be better if it would be better? [in:] 20 years of transformation. Achievements, Problems, Perspectives, ed. G.W. Kołodko, J. Tomkiewicz, Publishing and Academic & Professional Sp. with o.o, Warsaw, p. 101-118. [In Polish].

<sup>8</sup> Rapacki R. (red.), 2009, Economic growth in transition countries. Convergence or divergence?, Houghton Mifflin, Warsaw. [In Polish].

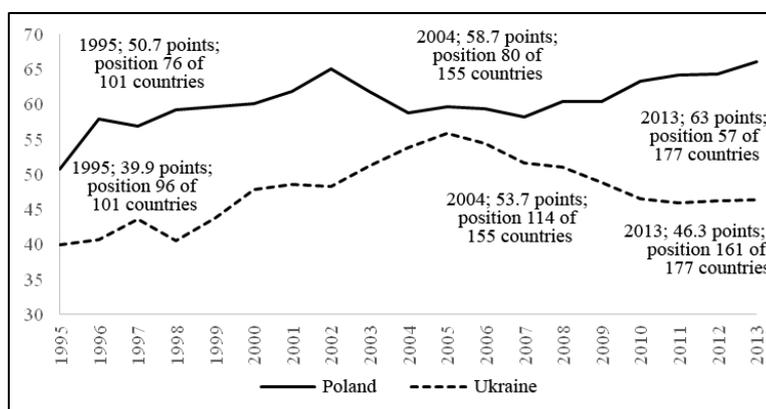
<sup>9</sup> Woźniak M.G., 2002, Poland's economic growth in the nineties. Barriers. Factors. Perspective, Publisher AE in Krakow, Krakow. [In Polish].

<sup>10</sup> Woźniak M.G., 2011, Polish Economy 1990-2011. Transformation. Modernization. Economic and social cohesion. Volume I. Transformation, PWN, Warsaw. [In Polish].

<sup>11</sup> CTEDB, 2013, The Conference Board Total Economy Database, January 2013, The Conference Board Inc., [E-resource] – Access mode: [www.conference-board.org](http://www.conference-board.org), [date of access: 10.09.2013]

significantly reduce development gap with respect to Western Europe countries. However, these countries were strongly affected by the financial crisis in 2009. The accumulated GDP of the EU-9 countries decreased in 2009 by more than 7 %, while in Poland it increased by 1.4 %<sup>12</sup>.

Taking into account numerous imperfections of the real GDP index per capita and HDI, while measuring the socio-economic development level one should also analyze other indicators demonstrating the level of economic freedom (Fig. 4) competitive business environment and efficiency of the country in terms of processing natural resources for improving well-being of the population (table 1). It should be emphasized that these indicators, with the exception of Happy Planet Index<sup>13</sup>, illustrate systematic convergence and determine the degree of market economy development.



**Fig. 4.** Economic freedom index according to *The Heritage Foundation* in 1989 – 2013.

Source: author's estimation by IEF database information, 2013<sup>14</sup>.

While comparing alternative well-being indicators for recent years, we should note that Poland moves up in the social and

<sup>12</sup> Jabłoński Ł., 2013, Factors of economic growth during the current crisis. Poland compared to selected countries in the world, «Social Inequality and Economic Growth», №30, p. 90–107. [In Polish].

<sup>13</sup> The Happy Planet Index is calculated based on three aspects, namely: life enjoyment level declared by citizens, life expectancy, as well as amount of natural resources consumed. HDI does not indicate happiness, as it might be assumed by the index name, but reflects effectiveness of the given country in terms of processing natural resources for improving the well-being of the population. It also shows the average number of happy living years of the country's population per unit of natural resources consumed. See.: Abdallah S., Thompson S., Michaelson J., Marks N., Steuer N., 2009, The (un)Happy Planet Index 2.0. Why good lives don't have to cost the Earth, The New Economics Foundation, London, UK., also Jabłoński Ł., 2012, Quality of life — the dynamics of convergence [in:] Polish Economy 1990-2011. Volume II. Modernization, ed. M.G. Wozniak, PWN, Warsaw, pp. 283-309. [In Polish].

<sup>14</sup> IEF, 2013, Index of Economic Freedom, The Heritage Foundation, Database, [E-resource] – Access mode: www.heritage.org, [date of access: 10.09.2013].

economic development ranking depending on the level of economic freedom, competitive business environment and efficiency of the country in terms of processing natural resources for improving well-being of the population.

**Table 1 Value of certain socio-economic development indices for Poland and Ukraine in 2005–2012**

Index	Period	Poland		Ukraine	
		Ranking position change	Ranking position (2012)	Ranking position change	Ranking position (2012)
Competitiveness index (World Economic Forum, ranking of 144 countries)	2008-2012	+10	41	0	73
Ease of doing business index (World Bank, ranking of 185 countries)	2010-2012	+18	55	+9	137
Happy Planet Index (The New Economics Foundation, ranking of 151 countries)	2005-2010	+6	71 (2010)	-5	100 (2010)

Source: author's estimation based on <sup>15,16,17,18</sup>

The above data illustrate lower-degree success of Ukraine as compared to Poland. However, it should be emphasized that according to the World Bank *Doing Business* 2013 report, both Ukraine and Poland were found among the top ten countries, which during recent years had achieved major advances in the field of regulation that contributed to more efficient business and economic operations<sup>19</sup>.

### Technological convergence

As a result of systemic transformation to an open market economy Poland ensured conditions for rapid technological convergence with developed countries. Liberalization of foreign trade meant opening of various channels for exchange of innovation,

<sup>15</sup> Abdallah S., Thompson S., Michaelson J., Marks N., Steuer N., 2009, The (un)Happy Planet Index 2.0. Why good lives don't have to cost the Earth, The New Economics Foundation, London, UK.

<sup>16</sup> WB, 2008, *Doing Business* 2008, The World Bank and the International Finance Corporation, Washington D.C.

<sup>17</sup> WB, 2012, *Doing Business* 2012. *Doing Business in a more transparent world*, The World Bank and the International Finance Corporation, Washington D.C.

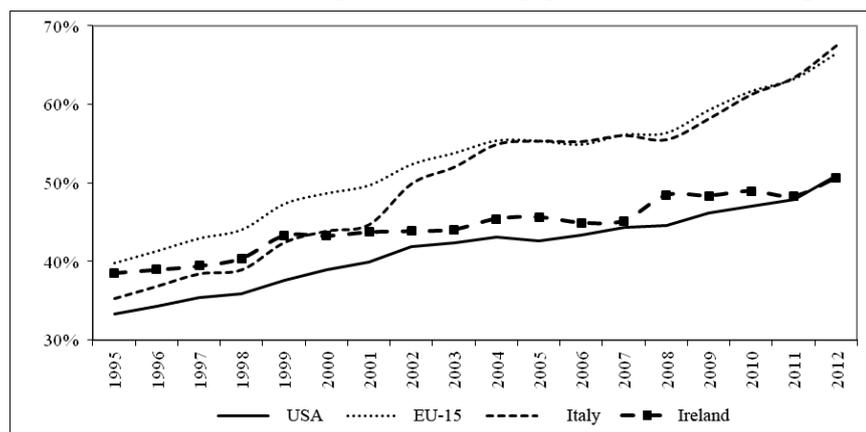
<sup>18</sup> WEF, 2013, The Global Competitiveness Index Data Platform, World Economic Forum, www.weforum.org, [date of access: 10.09.2013]

<sup>19</sup> WB, 2013, *Doing Business* 2013. *Smarter Regulations for Small and Medium-Size Enterprises*, The World Bank and the International Finance Corporation, Washington D.C.

which provides a major tool to reduce technological gap by the medium developed countries. The freedom of economic relations catalyzed action of microeconomic factors for modernization of productive capacity and product range. At the same time Poland met the essential requirements to spontaneous exchange of innovations in the field of education and infrastructure.

Participation in the EU integration process has prompted additional impetus for technological convergence through the following: increase in trade with EU developed countries, cooperation of importers and exporters with counterparties in these countries, investment climate improvement and respectively – stimulation of direct foreign investment, increased population mobility, development of scientific cooperation and additional funding sources within the European funds<sup>20</sup>.

Statistical data relating to various aspects of technological development confirm that both during the period prior to signing the association agreement and during the first nine years of EU membership, the pronounced technological convergence of Poland with developed countries has been taking place. The main manifestation of this process was elimination of the 'performance gap', as shown by Fig. 5.



**Fig. 5.** Labour productivity in Poland as compared with selected countries (1995–2012)

Source: author's estimation by UNECE database information, 2013<sup>21</sup>.

In the mid 1990s, labour productivity in Poland made circa 40 % of the similar index in the EU-15 countries. Over the last 17 years labour productivity in Poland rose by approximately 80 %,

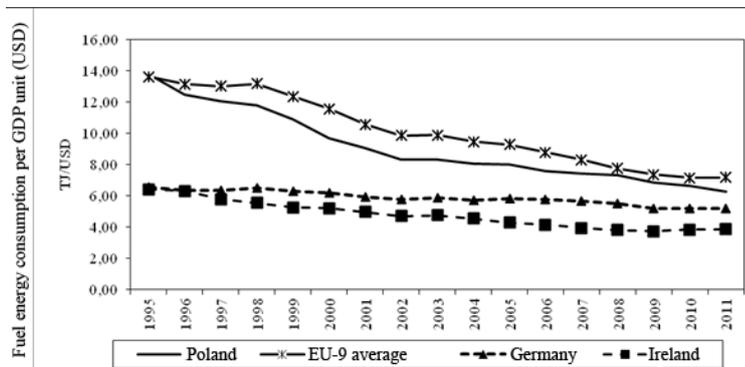
<sup>20</sup> Firszt D., 2012, Determinants of diffusion of innovation in the Polish economy, CeDeWu, Warsaw [In Polish].

<sup>21</sup> UNECE, 2013, [E-resource] – Access mode: <http://w3.unece.org/pxweb/>, [date of access: 12.09.2013]

whereby in 2012 reaching the value of 2/3 of the 'old EU' index. Productivity gap also decreased in relation to the most developed EU-15 countries. For instance, in relation to Ireland, Poland reduced the distance by 12 %. In relation to the slowest developing EU countries (e.g. Italy) such reduction made almost 30 %.

In any case, labour productivity changes are the main manifestation of technological development, although mere this index analysis is not sufficient to draw the complete picture of economic modernization, which is a multivariable process generating various economic and social effects. Therefore, it is worthwhile paying attention to other development indices such as GDP energy intensity. This index changes both point at modernization of production facilities and suggest changes in the economic structure, while also reflecting developments in technologies applied by households, which is an important manifestation of technological development and progress.

Fig. 6 demonstrates that during analyzed period the energy costs required for manufacturing a GDP unit in Poland have been reduced almost by half. In this case the pace of change has been much higher than in the developed EU countries (for example, many of them demonstrated negligible changes in this regard), which sustains conclusions as to technological convergence mentioned above in terms of labour productivity analysis. It should be added that such index improvement has been also recorded in other Central and Eastern European countries (EU-9), thus confirming thesis as to the positive impact of EU integration on the technological convergence processes.



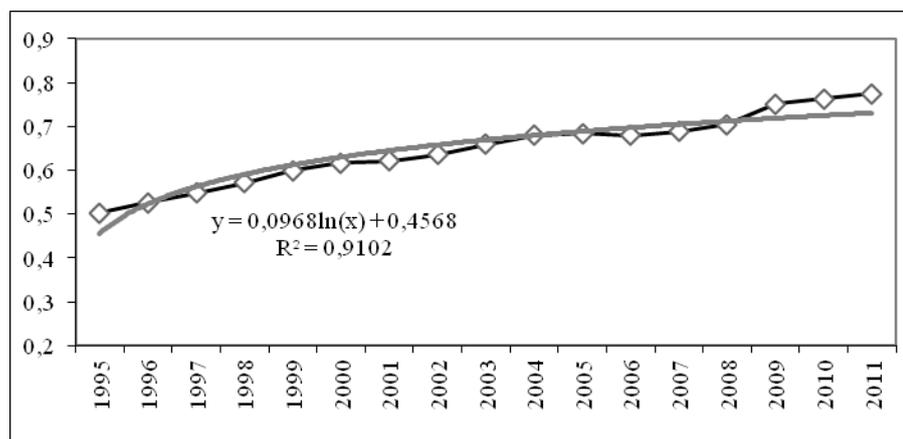
**Fig. 6.** GDP energy intensity (TJ/USD) in Poland and selected countries

Source: author's estimation based on the Eurostat information, 2013<sup>22</sup>.

<sup>22</sup> Eurostat, 2013, [E-resource] – Access mode: <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>, [date of access: 12.09.2013]

The thesis as to technological convergence implemented within the EU by Poland and other 'new countries' is also confirmed by other indices directly or indirectly related to technological development. For instance, total factor productivity (TFP) dynamics during the analyzed period in Poland has been much higher than in the developed EU countries; while the share of high-tech products in Poland exports doubled from 3 % in 1995 to around 6 % as of present; whereas that of low-tech products in manufacture structure has been significantly reduced.

Among all the above indices, the generalized one is the technological progress synthetic index determined by the factor analysis method<sup>23</sup>. Its relative value (as compared to the similar index of the German economy, a recognized technology leader in the EU) for the Polish economy is presented in Fig. 7, which clearly indicates reduction of the technological gap between Poland and Germany, which is taking place at logarithmic rate according to the innovation theory. Poland is rapidly catching up with the leader, while its current technological level makes s of the German one (in the mid 1990s it had only made 50 %).



**Fig. 7.** Elimination of the technological gap between Poland and Germany – a trend function.

Source: author's estimation based on the database information<sup>24,25,26</sup>.

<sup>23</sup> Firszt D., 2012, Determinants of diffusion of innovation in the Polish economy, CeDeWu, Warsaw [In Polish].

<sup>24</sup> Eurostat, 2013, [E-resource] – Access mode: <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>, [date of access: 12.09.2013]

<sup>25</sup> UNECE, 2013, [E-resource] – Access mode: <http://w3.unece.org/pxweb/>, [date of access: 12.09.2013]

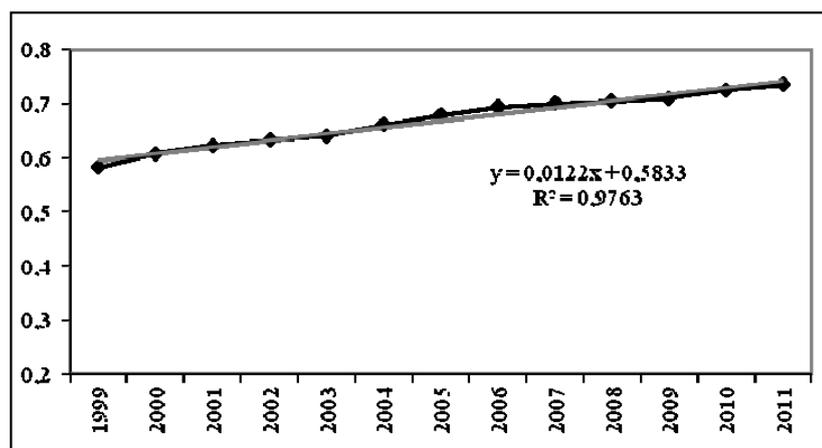
<sup>26</sup> GUS, 2013, [E-resource] – Access mode: <http://www.stat.gov.pl/gus/>, [date of access: 11.09.2013]

Currently, the most important matter is whether Poland is capable of crossing the critical threshold, and thus making transition from development based on the exchange of innovation (exogenous development) to that stimulated by own innovation (endogenous development). The innovation theory sustained by examples of certain EU countries (South Europe) shows that the integration provides conditions for technological convergence, but does not guarantee success thereof, i.e. accession of a backward country to the group of technological leaders. To that end, it is necessary to promote development of domestic capacity, which should over time of the economic and technological development be aimed at creating original innovations<sup>27</sup>. Fig. 8 shows that in Poland this capacity is being systematically improved, prompting hopes that further technological convergence is indeed possible. The most important and yet most difficult task faced by the Polish economy (in the context of economic development) is to accelerate the absorption capacity rate, so that it would compensate for the effect created by 'advantages of backwardness' though weakened by technological gap reduction. Although in this case the EU is also providing certain tools and means (European foundations intended for scientific research), at this stage of development the Poland's own efforts to develop the effective innovation system prove vigorous. The said efforts grow increasingly visible, although currently they are mainly related to scientific diagnosis rather than to practical actions aimed at innovativeness improvement. Particularly noteworthy are results of studies aimed at identifying weaknesses of the Polish innovation system that create so-called innovative blockades hindering gradual transition to the economy of knowledge and innovation model concepts based on integrated multilevel management and aimed at spreading innovation competencies<sup>28</sup>.

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<sup>27</sup> Kubiela S, 2009, Innovation and technological gap in the global economy based on knowledge, Publishing, University of Warsaw, Warsaw, Poland. [In Polish].

<sup>28</sup> Bał Woźniak T., Innovativeness by subject. Institutional determinants, PWE, Warsaw, 2012 [In Polish].



**Fig. 8.** Consumer capacity growth rate in the Polish economy (1996-2011)

Source: author's estimation by database information<sup>29,30,31</sup>; consumer capacity index computation methodology<sup>32</sup>.

### Determinants of Poland convergence with EU

The processes of real, systemic and technological convergence in Poland not only had similar historical pre-requisites as in the case of Ukraine, but also exogenous ones arising from development of global economy ties, including the decade of EU membership and dynamics of globalization and liberalization processes extrapolating to the national economy. However, one should pay attention also to the endogenous prerequisites of development, since those resulted from decision-making processes and determine the area of development.

The Polish experience shows that EU membership does not necessarily imply greater sensitivity of a less developed national economy to impulses of external crises. Even a reverse situation may occur, however subject to reasonable policy advocated by the government. EU membership contributed to Poland overcoming problems of the crisis, although at its last stage short-term difficulties emerged manifested by lower GDP growth. The question

<sup>29</sup> Eurostat, 2013, [E-resource] – Access mode: <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>, [date of access: 12.09.2013]

<sup>30</sup> UNECE, 2013, [E-resource] – Access mode: <http://w3.unece.org/pxweb/>, [date of access: 12.09.2013]

<sup>31</sup> GUS, 2013, [E-resource] – Access mode: <http://www.stat.gov.pl/gus/>, [date of access: 11.09.2013]

<sup>32</sup> Firszt D., 2012, Determinants of diffusion of innovation in the Polish economy, CeDeWu, Warsaw [In Polish].

is what was the reason for the Polish economy quite easily surviving the crisis, while other countries in Central and Eastern Europe have suffered more losses.

Among the success factors one should distinguish those associated with EU membership and economic policy of the government:

1. Accessing the large and demanding sales market of the EU, resulting in the GDP export share increase from 26.2 % in 1990 to 33.3 % prior to the association with EU, and to 49 % in 2013.

2. Effective application of the subsidiary principle to the national investment demand. During 2004–2013 net transfers from the EU budget after quota adjustment by the amount of obligatory membership-related payments to the budget amounted to EUR 58.1 billion. Due to this, in 2008–2012 annual GDP increase in demand circa 2 % was ensured, with the percentage even higher if multifold effect were accounted for.

3. Better representation of the Polish economy state by rating agencies due to domestic demand improvement via subsidiary funding from the EU and the need for implementing effective macroeconomic policy. This produced a positive effect on Poland's attractiveness as a safe territory for FDI.

4. Existence of own currency and floating exchange rate of the zloty, systematic increase in foreign exchange reserves (from USD 34.2 billion in 2003 to USD 108.8 billion in March 2013). The government skilfully used the currency reserves in exchange rate policy which has stopped the fall in exports and excessive increase in imports. Spontaneous currency devaluation by 1/3 during the first phase of the crisis occurred abruptly, whereby radically increasing external competitiveness of the Polish economy (attractiveness of both Polish products and Polish exports). Taken this into account, Poland was less affected by the euro-zone crisis than countries of Central and Eastern Europe.

5. Fiscal reforms including reduction of the third 40 % personal income tax on social insurance from 6.5 % to 3.5 %, as implemented before the crisis contributed to reduction of labour costs. Due to this, competitiveness of the Polish economy increased and national consumer demand was supported.

6. Incomes of more than two million Polish immigrants, to whom labour markets of the EU Members States were opened, annually replenish national demand to the extent of EUR 4–5 billion.

There have also been weak points in the Polish systemic reforms and economic policy, which could not be avoided. Among those, the following should be considered:

1. Lack of a coherent governmental economic policy, especially of the structural one.
2. Postponement of the unaccomplished public sector reforms (pension fund, Criminal Code, healthcare, education and training).
3. Underestimation of the sound family policy for economic growth promotion.
4. Uneven time-distribution of investments to infrastructure funded by the state budget and European funds. This especially concerns sharp reduction thereof after Euro 2012 in Poland, which entailed the low (1.5 %) GDP growth rate in 2013.
5. Economic policy underestimating the issue of exports diversification in the event of market fluctuations involving major foreign partners.

However, the development potential of Poland enabled return to the path of dynamic GDP growth and quality of life improvement in 2014. The most important components thereof include the following:

1. High quality of products manufactured in Poland. Under the influence of foreign competition and the crisis, quality of products and services has improved to the extent which provides for the increasing growth in Polish produce substituting imports and meeting competition demands in foreign markets.
2. Relatively large amounts of cash placed by businesses as bank deposits and low interest rates. Since 2008, the NBP rate decreased by 3.25 % reaching 2.5 % in 2013, while the inflation rate went down from 4.8 % and 1.1 % respectively.
3. Relatively effective application of automatic market condition stabilizers, i.e. increase in monetary payments from the budget, unemployment combating programmes, easy access to loans as resulted from lowering interest rates. The new expenditure stabilizing mechanism improves market condition stabilization by preventing possibility of exceeding the 55 % threshold of public debt ratio in GDP and stipulating marginal costs at no more than the average annual GDP rate increased by the inflation percentage forecast.
4. The prospects of expanding public sector investment resulting from access to the alternative investment programmes planned for 2014–2020 and financed from EU funds in the amount of EUR 72.9 billion (circa PLZ 400 billion). These measures will contribute to investment in scientific research and

commercialization of their results, as well as to investment in key road links (motorways), business development, environment-friendly transport (trains, public transport), country digitization (free Internet access, e-services of government and administration), social integration and professional activation.

After a long period of stagnation private sector investment should increase due to the drastic changes in returning of positive economic conditions in the USA and the EU. Private sector investment will be encouraged by provided incentives, privileges and bonuses for all investors deciding to invest in Poland.

However, the financial crisis offered new challenges to the euro-zone that the EU and each of its members must cope with. The EU countries, particularly those in the euro-zone, which have already carried out a number of institutional changes, should also continue to pursue reform. The spheres of these reforms are already being clearly determined.

During rather difficult times of crisis in 2008–2012, Polish economy has proved resilient to the recession. In this period, GDP grew by almost 20 %, exports – by 38 %, while nominal wages have been increased by 40 %. Poland has proved the most attractive economic partner for the strongest EU economy – Germany. Although, Poland's public debt has grown by 10 %, its share in GDP is the EU lowest. Poland meets the post-crisis future showing the GDP growth prospects, due to which for the whole decade of using financial support from the structural, agricultural and general funds there is a real chance of GDP value doubling from circa PLZ 1 trillion to PLZ 2 trillion in 2017.

### **Prospects of Poland convergence with EU till 2020**

Poland and other EU countries have reached a new stage of development processes integration. The Lisbon Treaty which entered into force in December 2009 is also focused on sustainable economic, social and environmental development, as well as on strengthening convergence processes in the field of economic growth and socio-economic measuring on both international and national scale.

The 'EU Procedural Code' is applied along with mediation by a multilevel network of actors. It should not be regarded as a tool for achieving changes for the better or as alternative to the widespread policy and opportunism of the interested parties. As known,

people act amid the space and time context with their own desires and thus, there is a chance for implementation of national development strategies adapted to the specific national conditions. However, it is required to respect the Community regulations relating to competitiveness, coordination procedures, harmonization of economic systems and state policies. They are associated with the new fiscal pact and the planned banking union.

The risk of exceeding the 55 % threshold of compulsory public debt prevents further depreciation of the zloty, as the government has to confront this fearing the consequences arising from the threshold excess. Until improvement in public finances has been achieved, the competitiveness increase factor will not apply. Fiscal reduction by reducing government spending and potential increase in fiscal revenues as well as expectations for economic growth effects resulting from the forecast improvement in global economic conditions are now the main methods adhered to by the government. This inevitably entails cooling of the economy.

Had the policy during the first two years of the crisis been focused also on stimulating consumer demand by the least-earning people (whereby causing no expense to public finances), there would have not been such an urgent need to raise the VAT rate or payroll taxes rates, or to freeze wages and cut public spending. This would have created more protection opportunities against recession. With such a passive policy of the government in 2009–2012 the actual processes in Poland have been formed primarily under the influence of exogenous factors.

The capability to implement *Europe 2020* strategy aimed at smart, sustainable and inclusive growth will be of fundamental importance. This strategy encompasses three interrelated priorities:

- Smart growth: knowledge and innovation-based economy development;

- Sustainable growth: creation of economy efficiently using resources, more environment-friendly and more competitive;

- Inclusive development contributing to social integration: support of economy with a high level of employment, providing for social and territorial cohesion.

- For substantiation thereof in the run up to 2020, the European Commission proposes to implement several major goals for all EU Member States, namely:

- Index of employment for persons aged 20–64 years at 75 %;
- 3 % of the EU GDP should be invested in research and development;

— *20/20/20* strategic framework in the field of climate and energy (including reduction of greenhouse gas emissions by 20 %, reduction of carbon emissions by 30 %, provided respective conditions are met, increase of renewable energy share by 20 % as well as 20 % energy consumption reduction by 2020);

— Reducing the number of people early completing schooling to 10 %, and increase of younger generation people with higher education at least to 40 %;

— Reducing the number of people below the poverty line by 20 million.

The EU objectives should be developed at the national level with appropriate action taken. The systemic conditions for appropriate implementation of these objectives are related to the following: accomplishment of the common market development, establishment of free trade areas with the United States and addressing issues in the field of climate policy. Also, development of the common market for services should be accomplished, especially in the field of financial services. Introduction of these systemic reforms requires public pressure on politicians, associated with the elimination of institutional barriers in the field of quality of life improvement and harmonization of the social and economic development processes without any negative consequences for economic growth.

The strategy shows that Europe can develop smartly and inclusively as well as contribute to social integration and find ways to create new jobs and identify areas for social development by each of its members. The EU has powerful tools such as new financial management methods, approved budget for 2014–2020, trade exchange and foreign economic policy, as well as stable competitive institutions and total involvement of European leaders and institutions. Effective implementation of the new strategy requires coordinated action across Europe, along with involvement of social partners and civil society representatives.

### **Conclusions for Ukraine**

In Ukraine, the dilemma of selecting economic development model and international integration directions is still a topical issue. Whatever political statements about possible integration with the EU may have been declared recently by Ukrainian authorities, the issue remains unresolved. In such circumstances, there is a natural desire to seek positive examples of other coun-

tries joining the EU by which has yielded both economic and social benefits.

Considerations presented in this paper indicate that such an example for Ukraine could be Polish economy, which from the very start of the EU integration process has proceeded to the dynamic development phase resulting in pronounced convergence with the richest countries in Europe. Such development was determined by numerous factors; and yet there are lots of prerequisites for asserting that the EU accession was one of the most important ones, especially if considering its indirect impact on the changes taking place in the real sector and in the field of regulation. The fundamental importance was also vested in the fact that Poland had in addition to the unequivocally declared intention to integrate with the European Community in the early 1990s also formulated a clear strategy of reforms according to the EU legal acts which were gradually implemented. Similar changes also occurred in other countries of Central and Eastern Europe, which together with Poland have been undergoing the association process, and later on – that of joining the EU. Ukraine has been lacking the disciplinary factor implying integration requirements, which was one of the reasons that the institutional reform process yielded no results, while many reforms planned have been implemented selectively and often too stretched over time, eventually retaining local nature<sup>33</sup>. It can be assumed that beginning of the Ukraine's integration process and implementation of the EU legal order would improve institutional system consistency, whereby contributing to reducing corruption, improving quality of management, promotion of entrepreneurship, technological modernization, improving labour productivity and competitiveness of the economy.

In terms of the current discussion in Ukraine as to alternative forms and directions of international cooperation, Poland is certainly not the only positive example. Supporters of concepts competitive to pro-European ones may use examples of other dynamically developing economies outside Europe, which may also appear attractive. However, one must note that an attempt to follow decisions taken by countries with other historical, cultural and social background entails a significant risk of achieving results inconsistent with expectations. At the same time, Poland and Ukraine have a great common historical experience, the ef-

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<sup>33</sup> Firszt D., Jabłoński Ł., Tokarski T., Woźniak M.G., 2009, *Convergence and Divergence in Europe: Polish and Ukrainian Cases: Monograph* / scientific editors Dmytro Lukianenko, Viktor Chuzhykov, Machal Gabriel Woznaniak, Foundation of the University of Economics in Krakow, Krakow, p. 630. [In Polish].

fect of which can be seen in social, cultural and mental similarities. Therefore, we can assume that Ukraine's selecting integration model based on the Polish experience would be useful both in terms of implementation ease and achieved social and economic outcomes.

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